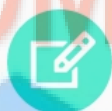
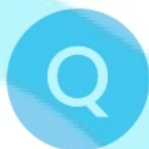


WWW.SAEEDMDCAT.COM



QUIZZES

Practice test-1(Hydrocarbons)



10 Questions



7 min

Topics

Free radical reaction and Mechanism

Start Quiz

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

06 : 56



1/10



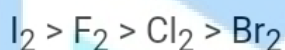
7 min



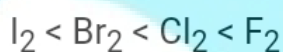
Hint

Q : The order of reactivity of halogens with alkanes is in the order of

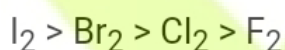
A



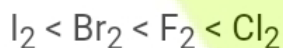
B



C



D



SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 53



2/10



7 min



Hint

Q : In halogenation of alkane, the least reactive halogen is

A

F_2

B

I_2

C

Cl_2

D

Br_2

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 51



3/10



7 min



Hint

Q : In free radical mechanism the step in which free radical react with free radical is called

A

Initiation

B

Propagation

C

Termination

D

All of the above

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 48



4/10



7 min



Hint

Q : The order of reactivity of halogens with alkanes in sunlight is

A

$I_2 > Br_2 > Cl_2 > F_2$

B

$Cl_2 > Br_2 > F_2 > I_2$

C

$F_2 > Cl_2 > Br_2 > I_2$

D

None of these

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 46



5/10



7 min



Hint

Q : Formula of chloroform is

A

CH_3Cl

B

CCl_4

C

CH_2Cl_2

D

CHCl_3

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 44



6/10



7 min



Hint

Q :

When methane reacts with Cl_2 in the presence of diffused sunlight, the products obtained are

A

Chloroform only

B

Carbon tetrachloride only

C

Chloromethane and dichloromethane

D

Mixture of a, b, c

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 41



7/10



7 min



Hint

Q : Propagation of free radical mechanism takes place by the

A

Reaction of free radical with free radical

B

Formation of two free radicals

C

Consumption as well as production of another free radical

D

Reaction between two molecules

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 37



8/10



7 min



Hint

Q : The chlorination of methane to give CCl_4 is an example of

A

An addition reaction

B

A chain reaction

C

A reduction

D

An elimination reaction

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

4

5

6

7

8

9

10

06 : 34



9/10



7 min



Hint

Q : Which one of the following is called free radical

A



B



C



D



SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

4

5

6

7

8

9

10

06 : 32



10/10



7 min



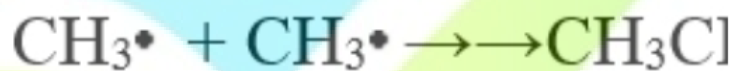
Hint

Q : Which one of the following is a initiation step in the reaction between CH_4 and Cl_2

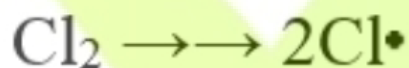
A



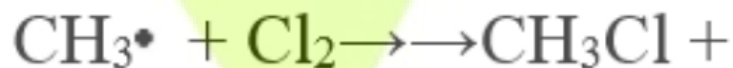
B



C



D



SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

4

5

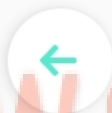
6

7

8

9

10



QUIZ RESULT

Practice test-1(Hydrocarbons)



10



7 min



01-May-2021



0 sec



0/10



0.0%

SAEED MDCAT

Result Detail

SAEED MDCAT TEAM



SAEEDMDCAT





Practice test-1(Hydrocarbons)



Correct



Unattempted



Incorrect



1/10

Q : The order of reactivity of halogens with alkanes is in the order of



$I_2 > F_2 > Cl_2 > Br_2$



$I_2 < Br_2 < Cl_2 < F_2$



$I_2 > Br_2 > Cl_2 > F_2$



$I_2 < Br_2 < F_2 < Cl_2$

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7



Practice test-1(Hydrocarbons)



Correct



Unattempted



Incorrect



2/10

Q : In halogenation of alkane, the least reactive halogen is



F_2



I_2



Cl_2



Br_2

Explanation

SAEED MDCAT TEAM

The order of reactivity of halogens with alkanes is in the order $I_2 < Br_2 < Cl_2 < F_2$



SAEEDMDCAT

1

2

3

4

5

6

7



Practice test-1(Hydrocarbons)



Correct



Unattempted



Incorrect



3/10

Q : In free radical mechanism the step in which free radical react with free radical is called

A

Initiation

B

Propagation

C

Termination

D

All of the above

Explanation

These are the termination reactions



1

2

3

4

5

6

7



Practice test-1(Hydrocarbons)



Correct



Unattempted



Incorrect



4/10

Q : The order of reactivity of halogens with alkanes in sunlight is

A

$I_2 > Br_2 > Cl_2 > F_2$

B

$Cl_2 > Br_2 > F_2 > I_2$

C

$F_2 > Cl_2 > Br_2 > I_2$

D

None of these

Explanation

SAEED MDCAT TEAM

The order of reactivity of halogens with alkanes in sunlight is $F_2 > Cl_2 > Br_2 > I_2$



SAEEDMDCAT

1

2

3

4

5

6

7



Practice test-1(Hydrocarbons)



Correct



Unattempted



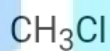
Incorrect



5/10

Q : Formula of chloroform is

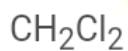
A



B



C



D



Explanation

Formula of chloroform is CHCl_3



SAEEDMDCAT

1

2

3

4

5

6

7



Practice test-1(Hydrocarbons)



Correct



Unattempted



Incorrect



6/10

Q :

When methane reacts with Cl_2 in the presence of diffused sunlight, the products obtained are

A

Chloroform only

B

Carbon tetrachloride only

C

Chloromethane and dichloromethane

D

Mixture of a, b, c

Explanation

By free Radical Mechanism of alkanes chloroform, chloromethane, dichloromethane, and carbon tetra chloride is produce

1

2

3

4

5

6

7



Practice test-1(Hydrocarbons)



Correct



Unattempted



Incorrect



7/10

Q : Propagation of free radical mechanism takes place by the

A

Reaction of free radical with free radical

B

Formation of two free radicals

C

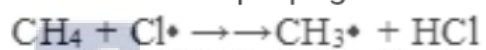
Consumption as well as production of another free radical

D

Reaction between two molecules

Explanation

These are the propagation reactions:



1

2

3

4

5

6

7



Practice test-1(Hydrocarbons)



Correct



Unattempted



Incorrect



8/10

Q : The chlorination of methane to give CCl_4 is an example of

A

An addition reaction

B

A chain reaction

C

A reduction

D

An elimination reaction

Explanation

Halogenation of alkanes is a free radical mechanism, which consists of three steps:

1. Initiation

1. Propagation

1. Termination

This reaction is also considered as chain reaction

4

5

6

7

8

9

10



Practice test-1(Hydrocarbons)



Correct



Unattempted



Incorrect



9/10

Q : Which one of the following is called free radical

A



B



C



D



Explanation

A **free radical** can be defined as any molecular species capable of independent existence that contains an unpaired electron in an atomic orbital. It is represented as Cl^\cdot (a dot on top right corner of the symbol)



Practice test-1(Hydrocarbons)



Correct



Unattempted



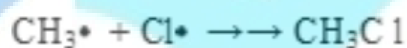
Incorrect



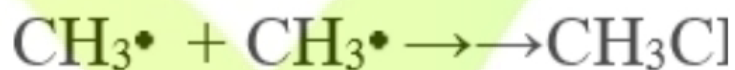
10/10

Q : Which one of the following is a initiation step in the reaction between CH_4 and Cl_2

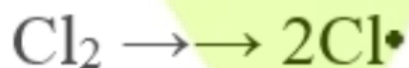
A



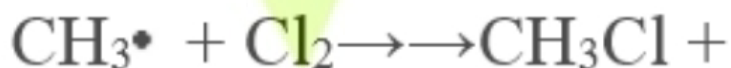
B



C



D



Explanation

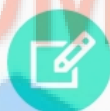
SAEED MDCAT TEAM

An **initiation step** is a reaction in which radicals are generated from a stable specie



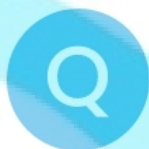
SAEEDMDCAT

WWW.SAEEDMDCAT.COM



QUIZZES

Practice test-2(Hydrocarbons)



10 Questions



7 min

Topics

Structure, preparation and reactivity of Alkenes

Start Quiz

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

06 : 57



1/10



7 min



Hint

Q :

If ozonolysis of an alkene produce acetone and propionaldehyde, then the alkene is:

A

2-Methyl-1-pentene

B

2-Methyl-3-Ethyl-propene

C

2-Methyl-2-pentene

D

4-Methyl-3-pentene



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 55



2/10



7 min



Hint

Q :

Which of the following set can be used for dehydration of alcohols?

A

Al_2O_3 , H_2SO_4 , H_3PO_4 , P_4O_{10}

B

AlCl_3 , H_2SO_4 , H_3PO_4

C

Al_2O_3 , H_2SO_4 , H_2PO_3 , P_4O_{10}

D

AlCl_3 , H_2SO_4 , H_3PO_4 , P_2O_3

1

2

3

4

5

6

7

06 : 53



3/10



7 min



Hint

Q :

The ease of dehydration of alcohols is in the order of:

A

Tertiary alcohol > Primary alcohol >
Secondary alcohol

B

Tertiary alcohol > Secondary alcohol >
Primary alcohol

C

Tertiary alcohol < Primary alcohol >
Secondary alcohol

D

Secondary alcohol > Primary alcohol >
Tertiary alcohol



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 50



4/10



7 min



Hint

Q :

The test for unsaturation of organic compounds is carried out by treating alkenes with 1% dilute alkaline KMnO_4 solution. The color of KMnO_4 is discharged with the formation of:

A

Ethylene glycol

B

Vicinal glycol

C

Glyoxal

D

Oxalic acid

1

2

3

4

5

6

7

06 : 48



5/10



7 min



Hint

Q :

Ozonides are unstable compounds and are reduced to carbonyl compounds with Zn and H_2O . This test is used to locate position of:

A

C = C bond

B

C = O bond

C

C = N bond

D

All of these

1

2

3

4

5

6

7

06 : 46



6/10



7 min



Hint

Q :

Addition of HX to $\text{CH}_3\text{CH} = \text{CH}_2$ takes place according to:

A

Hund's Rule

B

Markownikov's Rule

C

Aufbau principle

D

Octet rule

1

2

3

4

5

6

7

06 : 43



7/10



7 min

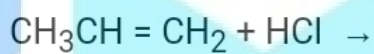


Hint

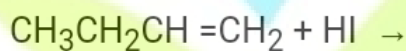
Q :

In which reaction addition Markownikov's rule is not obeyed:

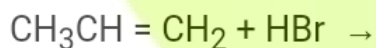
A



B



C



D



SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 40



8/10



7 min



Hint

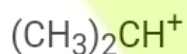
Q :

Which ion is the most stable carbocation?

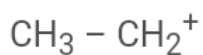
A



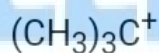
B



C



D



4

5

6

7

8

9

10

06 : 37



9/10



7 min



Hint

Q :

The olefins are

V



Alkane



alkene



alkyne



none of these



SAEEDMDCAT

4

5

6

7

8

9

10

06 : 34



10/10



7 min



Hint

Q :

The dehydration of tertiary alcohols can be done in the presence of

A

$\text{Al}_2\text{O}_3/340 - 450^\circ\text{C}$

B

75% conc. H_2SO_4 / $140-170^\circ\text{C}$

C

20% conc. H_2SO_4 / 85°C

D

all of these

4

5

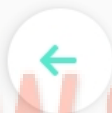
6

7

8

9

10



QUIZ RESULT

Practice test-2(Hydrocarbons)



10



7 min



01-May-2021



0 sec



0/10



0.0%

SAEED MDCAT

Result Detail

SAEED MDCAT TEAM



SAEEDMDCAT





Practice test-2(Hydrocarbons)



Correct



Unattempted



Incorrect



1/10

Q :

If ozonolysis of an alkene produce acetone and propionaldehyde, then the alkene is:



2-Methyl-1-pentene



2-Methyl-3-Ethyl-propene



2-Methyl-2-pentene



4-Methyl-3-pentene

1

2

3

4

5

6

7



Practice test-2(Hydrocarbons)

Q:

Which of the following set can be used for dehydration of alcohols?

A

Al_2O_3 , H_2SO_4 , H_3PO_4 , P_4O_{10}

B

AlCl_3 , H_2SO_4 , H_3PO_4

C

Al_2O_3 , H_2SO_4 , H_2PO_3 , P_4O_{10}

D

AlCl_3 , H_2SO_4 , H_3PO_4 , P_2O_3

Explanation



SAEEDMDCAT

Dehydrating agents

Al_2O_3 , H_2SO_4 , H_3PO_4 , P_4O_{10}



Practice test-2(Hydrocarbons)



Correct



Unattempted



Incorrect



3/10

Q:

The ease of dehydration of alcohols is in the order of:

A

Tertiary alcohol > Primary alcohol >
Secondary alcohol

B

Tertiary alcohol > Secondary alcohol >
Primary alcohol

C

Tertiary alcohol < Primary alcohol >
Secondary alcohol

D

Secondary alcohol > Primary alcohol >
Tertiary alcohol

1

2

3

4

5

6

7



Practice test-2(Hydrocarbons)

WWW.SAEEDMDCAT.COM

A

Tertiary alcohol > Primary alcohol >
Secondary alcohol

B

Tertiary alcohol > Secondary alcohol >
Primary alcohol

C

Tertiary alcohol < Primary alcohol >
Secondary alcohol

D

Secondary alcohol > Primary alcohol >
Tertiary alcohol

Explanation

Ease of dehydration of alcohols is 3° Alcohol >
 2° Alcohol > 1° Alcohol

Because more electron donating group attached
with 3° alcohol

1

2

3

4

5

6

7



Practice test-2(Hydrocarbons)

Q:

The test for unsaturation of organic compounds is carried out by treating alkenes with 1% dilute alkaline KMnO_4 solution. The color of KMnO_4 is discharged with the formation of:

A

Ethylene glycol

B

Vicinal glycol

C

Glyoxal

D

Oxalic acid



Explanation

SAEEDMDCAT

Bayer's test

1

2

3

4

5

6

7



Practice test-2(Hydrocarbons)

Ozonides are unstable compounds and are reduced to carbonyl compounds with Zn and H_2O . This test is used to locate position of:

A

C = C bond

B

C = O bond

C

C = N bond

D

All of these

Explanation



SAEEDMDCAT

Ozonolysis is used to test the position of double bond



Practice test-2(Hydrocarbons)

Incorrect



6/10

Q :

Addition of HX to $\text{CH}_3\text{CH}=\text{CH}_2$ takes place according to:

A

Hund's Rule

B

Markownikov's Rule

C

Aufbau principle

D

Octet rule



Explanation

SAEEDMDCAT

Addition of unsymmetrical reagent to an unsymmetrical alkenes follow Markonikov's rule.

1

2

3

4

5

6

7



Practice test-2(Hydrocarbons)



Correct



Unattempted



Incorrect

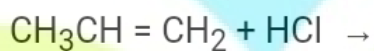


7/10

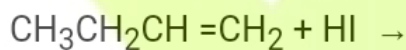
Q :

In which reaction addition Markownikov's rule is not obeyed:

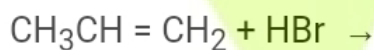
A



B



C



D



Explanation

Markonikov's rule is obeyed by only unsymmetrical alkenes.

2-Butene ($\text{CH}_3\text{CH}=\text{CHCH}_3$) is symmetrical alkene

1

2

3

4

5

6

7



Practice test-2(Hydrocarbons)

Incorrect



8/10

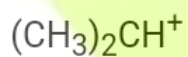
Q:

Which ion is the most stable carbocation?

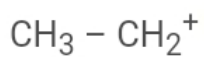
A



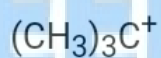
B



C



D



Explanation



SAEEDMDCAT

Order of stability of carbocations $3^\circ > 2^\circ > 1^\circ$

4

5

6

7

8

9

10



Practice test-2(Hydrocarbons)



Correct



Unattempted



Incorrect



9/10

Q :

The olefins are

V

A

Alkane

B

alkene

C

alkyne

D

none of these

4

5

6

7

8

9

10



Practice test-2(Hydrocarbons)

Q:

The dehydration of tertiary alcohols can be done in the presence of

A

$\text{Al}_2\text{O}_3/340 - 450^\circ\text{C}$

B

75% conc. H_2SO_4 / $140-170^\circ\text{C}$

C

20% conc. H_2SO_4 / 85°C

D

all of these

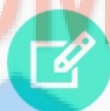
Explanation



SAEEDMDCAT

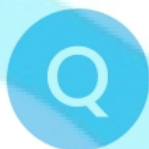
tertiary alcohols are easily oxidized relative to primary and secondary alcohols. Thus, tertiary alcohols require relatively mild condition for dehydration

WWW.SAEEDMDCAT.COM



QUIZZES

Practice test-3(Hydrocarbons)



10 Questions



7 min

Topics

Structure, preparation and reactivity of Alkynes

Start Quiz

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

06 : 58



1/10



7 min



Hint

Q :

When 20% H_2SO_4 reacts with propyne in the presence of HgSO_4 , it gives

A

Ethanal

B

Propanol

C

Propanoic Acid

D

Acetone

1

2

3

4

5

6

7

06 : 56



2/10



7 min



Hint

Q :

Acetone is prepared by the hydration of

A

Ethyne

B

Propyne

C

Ethane

D

Propane

1

2

3

4

5

6

7

06 : 52



3/10



7 min



Hint

Q :

Ethyne can be identified by treating with ammoniacal cuprous chloride or ammoniacal silver nitrate. Which of the following will also give this test?

A

Ethene

B

1-butyne

C

2-butyne

D

2-pentyne



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 50



4/10



7 min



Hint

Q :

Which of the following is used as a starting material for the production of ethyne

A



B



C



D



1

2

3

4

5

6

7

06 : 47



5/10



7 min



Hint

Q :

Which of the following reagent is used to distinguish between ethene and ethyne

A

Alkaline KMnO_4

B

Br_2 water

C

Cl_2 water

D

Ammoniacal Cu_2Cl_2

1

2

3

4

5

6

7

06 : 45



6/10



7 min



Hint

Q :

The Dicopper acetylide can be regenerated into ethyne by using

A

HCl

B

NaOH

C

KMnO₄

D

All of these

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 42



7/10



7 min

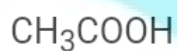


Hint

Q :

Chlorine reacts readily with ethyne in presence of

A



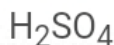
B



C



D



1

2

3

4

5

6

7

06 : 40



8/10



7 min



Hint

Q :

Ethyne polymerize into chloroprene in the presence of

A

$\text{Cu}_2\text{Cl}_2 / \text{NH}_4\text{Cl}$

B

$\text{Cu}_2\text{Cl}_2 / \text{NH}_4\text{OH}$

C

$\text{CuCl}_2 / \text{NH}_4\text{Cl}$

D

$\text{CuCl}_2 / \text{NH}_4\text{OH}$

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

4

5

6

7

8

9

10

06 : 37



9/10



7 min



Hint

Q :

In Kolbe's electrolysis ethyne can be prepared by using

A

Potassium succinate

B

Potassium maleate

C

Potassium acetate

D

Potassium formate

4

5

6

7

8

9

10

06 : 35



10/10



7 min



Hint

Q :

The formation of ethyne from ethylene di-bromide is an example of

A

Spontaneous reaction

B

Elimination reaction

C

Substitution reaction

D

Addition reaction

4

5

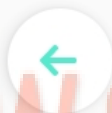
6

7

8

9

10



QUIZ RESULT

Practice test-3(Hydrocarbons)



10



7 min



01-May-2021



0 sec



0/10



0.0%

SAEED MDCAT

Result Detail

SAEED MDCAT TEAM



SAEEDMDCAT





Practice test-3(Hydrocarbons)



Correct



Unattempted



Incorrect



1/10

Q :

When 20% H_2SO_4 reacts with propyne in the presence of HgSO_4 , it gives



Ethanal



Propanol



Propanoic Acid



Acetone

1

2

3

4

5

6

7



Practice test-3(Hydrocarbons)



Correct



Unattempted



Incorrect



2/10

Q :

Acetone is prepared by the hydration of



Ethyne



Propyne



Ethane



Propane

1

2

3

4

5

6

7



Practice test-3(Hydrocarbons)

Incorrect



3/10

Q :

Ethyne can be identified by treating with ammoniacal cuprous chloride or ammoniacal silver nitrate. Which of the following will also give this test?

A

Ethene

B

1-butyne

C

2-butyne

D

2-pentyne



SAEEDMDCAT

Explanation

Terminal alkynes gives this test

1

2

3

4

5

6

7



Practice test-3(Hydrocarbons)

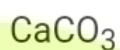
Q:

Which of the following is used as a starting material for the production of ethyne

A



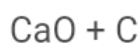
B



C



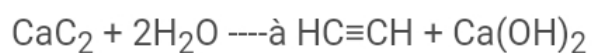
D



Explanation



SAEEDMDCAT



1

2

3

4

5

6

7



Practice test-3(Hydrocarbons)

Incorrect



5/10

Q :

Which of the following reagent is used to distinguish between ethene and ethyne

A

Alkaline KMnO_4

B

Br_2 water

C

Cl_2 water

D

Ammoniacal Cu_2Cl_2

SAEED MDCAT TEAM
Explanation



SAEEDMDCAT

Ethyne reacts with Ammoniacal Cu_2Cl_2 to give reddish brown ppt of dicopperacetylides whereas ethene does not reacts with ammoniacal Cu_2Cl_2

1

2

3

4

5

6

7



Practice test-3(Hydrocarbons)

Incorrect

Q

6/10

Q :

The Dicopper acetylide can be regenerated into ethyne by using

A

HCl

B

NaOH

C

KMnO₄

D

All of these



Explanation

SAEEDMDCAT

Silver and copper acetylides reacts with acids to regenerate ethyne

1

2

3

4

5

6

7



Practice test-3(Hydrocarbons)



Correct



Unattempted



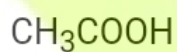
Incorrect



7/10

Q :

Chlorine reacts readily with ethyne in presence of



1

2

3

4

5

6

7



Practice test-3(Hydrocarbons)



Correct



Unattempted



Incorrect



8/10

Q :

Ethyne polymerize into chloroprene in the presence of



$\text{Cu}_2\text{Cl}_2 / \text{NH}_4\text{Cl}$



$\text{Cu}_2\text{Cl}_2 / \text{NH}_4\text{OH}$



$\text{CuCl}_2 / \text{NH}_4\text{Cl}$



$\text{CuCl}_2 / \text{NH}_4\text{OH}$

3

4

5

6

7

8

9



Practice test-3(Hydrocarbons)

Incorrect



9/10

Q :

In Kolbe's electrolysis ethyne can be prepared by using

A

Potassium succinate

B

Potassium maleate

C

Potassium acetate

D

Potassium formate

Explanation



SAEEDMDCAT

In Kolbe's electrolysis ethyne can be prepared by using salt of unsaturated dicarboxylic acid like Potassium maleate

3

4

5

6

7

8

9



Practice test-3(Hydrocarbons)

Q :

The formation of ethyne from ethylene di-bromide is an example of

A

Spontaneous reaction

B

Elimination reaction

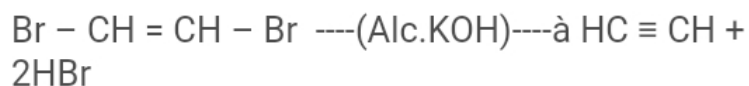
C

Substitution reaction

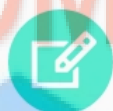
D

Addition reaction

Explanation

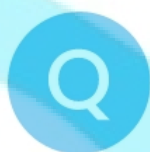


WWW.SAEEDMDCAT.COM



QUIZZES

Practice test-4(Hydrocarbons)



10 Questions



7 min

Topics

Benzene: Properties, Structure and Stability,
Reactivity and Reactions of Benzene

Start Quiz

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

06 : 57



1/10



7 min



Hint

Q :

The resonance energy of benzene is:

A

358.5 kJ/mole

B

-150.5 kJ/mole

C

150.5 kJ/mole

D

231.5 kJ/mole

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 52



2/10



7 min



Hint

Q :

According to modern concept benzene has:

A

Three Double bond

B

Two double bonds

C

Six delocalized π electrons

D

One double bond

1

2

3

4

5

6

7

06 : 50



3/10



7 min



Hint

Q :

What is a heat of hydrogenation of 1,3 -
cyclohexadiene

A

-119.5kJ/ mol

B

-150.5kJ/ mol

C

-231.5kJ/ mol

D

-208.5kJ/ mol

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 47



4/10



7 min



Hint

Q :

Which of the following is a tricyclic compound?

A

Benzene

B

Anthracene

C

Naphthalene

D

Toluene

1

2

3

4

5

6

7

06 : 43



5/10



7 min



Hint

Q :

The reaction of bromobenzene with ethylbromide in presence of Na/ether is called:

A

Wurtz reaction

B

Friedal craft reaction

C

Halogenation

D

Wurtz-Fittig reaction

1

2

3

4

5

6

7

06 : 40



6/10



7 min



Hint

Q :

Benzene shows _____ reactions.

A

Addition

B

substitution

C

both a & b

D

none of these

SAEED MDCAT
SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 38



7/10



7 min



Hint

Q :

Among the following compounds which can be readily sulphonated:

A

Phenol

B

Nitrobenzene

C

Benzene

D

Chlorobenzene

1

2

3

4

5

6

7

06 : 35



8/10



7 min



Hint

Q :

Which of the following is produced by the action of CH_3Cl on benzene in presence of AlCl_3 :

A

Toluene

B

Chlorobenzene

C

Ortho-Chlorotoluene

D

Both (a) and (b)



SAEEDMDCAT

4

5

6

7

8

9

10

06 : 32



9/10



7 min



Hint

Q :

Which one does not undergo polymerization?

A

Benzene

B

Ethyne

C

Ethene

D

Chloroprene

4

5

6

7

8

9

10

06 : 29



10/10



7 min



Hint

Q :

The conversion of benzene to chlorobenzene is an example of _____ reaction

A

Electrophilic addition

B

Nucleophile addition

C

Electrophilic substitution

D

Nucleophile substitution



SAEEDMDCAT

4

5

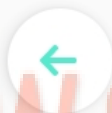
6

7

8

9

10



QUIZ RESULT

Practice test-4(Hydrocarbons)



10



7 min



01-May-2021



0 sec



0/10



0.0%

SAEED MDCAT

Result Detail

SAEED MDCAT TEAM



SAEEDMDCAT





Practice test-4 (Hydrocarbons)

Incorrect

Q

1/10

Q :

The resonance energy of benzene is:

A

358.5 kJ/mole

B

-150.5 kJ/mole

C

150.5 kJ/mole

D

231.5 kJ/mole



Explanation

SAEEDMDCAT

The resonance energy of benzene is 150.5 kJ/mol

1

2

3

4

5

6

7



Practice test-4 (Hydrocarbons)



Incorrect



2/10

Q:

According to modern concept benzene has:

A

Three Double bond

B

Two double bonds

C

Six delocalized π electrons

D

One double bond



Explanation

SAEEDMDCAT

Benzene has six delocalized pi electrons

1

2

3

4

5

6

7



Practice test-4(Hydrocarbons)

What is a heat of hydrogenation of 1,3 - cyclohexadiene

A

-119.5kJ/ mol

B

-150.5kJ/ mol

C

-231.5kJ/ mol

D

-208.5kJ/ mol

SAEED MDCAT

SAEED MDCAT TEAM

Explanation



SAEEDMDCAT

It contains 2 conjugate double bonds hence its heat of hydrogenation is slightly less than twice of the heat of hydrogenation of monoene.



Practice test-4 (Hydrocarbons)



Correct



Unattempted



Incorrect



4/10

Q :

Which of the following is a tricyclic compound?



Benzene



Anthracene



Naphthalene



Toluene

1

2

3

4

5

6

7



Practice test-4 (Hydrocarbons)



Correct



Unattempted



Incorrect



5/10

Q :

The reaction of bromobenzene with ethylbromide in presence of Na/ether is called:



Wurtz reaction



Friedal craft reaction



Halogenation



Wurtz-Fittig reaction

1

2

3

4

5

6

7



Practice test-4 (Hydrocarbons)

Incorrect



6/10

Q :

Benzene shows _____ reactions.

A

Addition

B

substitution

C

both a & b

D

none of these

SAEED MDCAT

SAEED MDCAT TEAM

Explanation



SAEEDMDCAT

Benzene gives addition reaction with hydrogen and halogens, and substitution reaction with Conc. HNO_3 and Conc. H_2SO_4

1

2

3

4

5

6

7



Practice test-4(Hydrocarbons)

Q:

Among the following compounds which can be readily sulphonated:

A

Phenol

B

Nitrobenzene

C

Benzene

D

Chlorobenzene

Explanation



Benzene having ortho-para director group are reactive.



Practice test-4 (Hydrocarbons)

Incorrect



8/10

Q :

Which of the following is produced by the action of CH_3Cl on benzene in presence of AlCl_3 :

A

Toluene

B

Chlorobenzene

C

Ortho-Chlorotoluene

D

Both (a) and (b)



Explanation

SAEEDMDCAT

Friedel-Craft alkylation

4

5

6

7

8

9

10



Practice test-4 (Hydrocarbons)



Correct



Unattempted



Incorrect



9/10

Q :

Which one does not undergo polymerization?



Benzene



Ethyne



Ethene



Chloroprene

4

5

6

7

8

9

10



Practice test-4 (Hydrocarbons)



Correct



Unattempted



Incorrect



10/10

Q :

The conversion of benzene to chlorobenzene is an example of _____ reaction



Electrophilic addition



Nucleophile addition



Electrophilic substitution



Nucleophile substitution

4

5

6

7

8

9

10